REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons which follow. After amending the claims as set forth above, claims 7-15 and 21-24 are now pending in this application.

In the Office Action, claims 1-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,511,156 to Nagasaka.

Claims 1-6 and 16-20 have been canceled.

Claim 7, as amended, recites a network system composed of a print server computer and a plurality of client computers. Each print server computer and client computer has a print data expander that expands print data to bit-map data. Each of the client computers comprises of a page divider that divides generated print data for each page into a plurality of bands. The generated print data is generated by an application. A transfer controller transfers a sequentially selected band to an available print data expander of the print server computer and client computer. The expanded bit-map band data is transferred to the print server computer. The print server computer comprises of a combiner that combines bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

Nagasaka teaches three computers, 6a, 6b and 6c, are connected to each other via a network (col. 6, lines 36-37). An intermediate code type file is formed and is then divided into plural portions. Then, the client process in computer 6A generates a printing request. Portions of the divided code are transferred to the processing interpreter. Each server process of the other computers, 6b and 6c, receives code data strings; extracts the data portion by a group reception processing; and transfers them to a rasterizer. The data is compressed by a picture element transfer processing and then outputted to the network through the picture element data transmission socket (col. 6, line 37 - col. 7, line 16).

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Nagasaka fails to teach or suggest that the print server computer combines bit-map band data expanded by the print data expander <u>of the print server computer</u> and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the <u>generated</u> print data, as recited in claim 7. Therefore, claim 7 is patentably distinguishable from Nagasaka.

Claims 8-12 are patentably distinguishable from Nagasaka by virtue of their dependence from claim 7, as well as their additional recitations.

Claim 13 recites a print data control method for a network system composed of a print server computer and a plurality of client computers. At each of the client computers, the print data is divided into a plurality of sequential bands; the sequential bands are distributed over the print server computer and at least one of the client computers expands the sequential bands to bit-map band data in parallel among the print server and at least one of the client computers. At the print server computer, the bit-map data expanded by the print server computer and at least one client computer to produce the bit-map data corresponding to the print data are combined.

Nagasaka fails to teach or suggest combining the bit-map data expanded by the print server computer and at least one client computer to produce the bit-map data corresponding to the print data. Therefore, claim 13 is patentably distinguishable from Nagasaka.

Claims 14-15 are patentably distinguishable from Nagasaka by virtue of their dependence from claim 13, as well as their additional recitations.

New claims 21-24 have been added. The content of these claims is supported in the specification originally filed with the present application. No new matter has been added.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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Version With Markings to Show Changes Made

7.   (Amended)   A network system composed of a [plurality of computers, comprising:] printer server computer and a plurality of client computers, wherein each of the printer server computer and the plurality of client computers has a print data expander for expanding print data to bit-map data, wherein

each of the plurality of client computers comprises:

a page divider for dividing generated [the] print data for each page into a plurality of bands, wherein the generated print data is generated by an application; and

a [band] transfer controller for transferring a sequentially selected one of the bands to an available one of [at least two] print data expanders [each implemented in a computer] of the printer server computer and other client computers, wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer, and

the printer server computer comprises:

a combiner for combining bit-map band data expanded by the [at least two] print data [expanders] expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

8.   (Amended)   The network system according to claim 7, wherein the transfer controller selects one band from the bands in sequence and further selects an available one of the [at least two] print data expanders of the printer server computer and the other client computers by checking a print data expanding process status received from [of] each of the [at least two print data expanders,] print server computer and the other client computers, and then transfers a selected band to a selected print data expander.

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9.   (Amended)   The network system according to claim 7, wherein, when receiving a band from another print data expander, each of the plurality of [at least two] print data expanders expands the [a] received band to bit-map band data, sets a print data expanding process status of a print data expander of its own to unavailable while expanding the received band, and resets the print data expanding process status to available when the expanding process of the received band has been [expanded] completed, wherein the print data expanding process status is used to determine whether a corresponding print data expander is available.

10.   (Amended)   The network system according to claim 8, wherein, when receiving a band from another print data expander, each of the plurality of [at least two] print data expanders expands the [a] received band to bit-map band data, sets [a] the print data expanding process status of its own [a print data expander] to unavailable while expanding the received band, and resets the print data expanding process status to available when the expanding process of the received band has been [expanded] completed.

11.   (Amended)   The network system according to claim 7, wherein the page divider divides the generated print data for each page into the bands which are numbered from top of a page in sequence.

12.   (Amended)   The network system according to claim 11, wherein the combiner receives the bit-map band data expanded by [from] the [at least two] print data [expanders] expander of the print server computer and the expanded bit-map band data received from said at least one of the client computers, determines whether the bit-map band data are received in original sequence of the bands, rearranges the bit-map band data in the original sequence when a sequence of the bit-map band data is not identical to the original sequence, and [reproducing] reproduces the bit-map data corresponding to the generated print data.

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13.   (Amended)   A print data control method for a network system composed of a print server computer and a plurality of client computers, comprising the steps of:

at each of the plurality of client computers,

a)   dividing print data into a plurality of sequential bands;

b)   distributing the sequential bands over the print server computer and at least one of the client [computer] computers to expand the sequential bands to bit-map band data in parallel among the print server computer and said at least one client computer; and

at the print server computer,

c)   combining the bit-map band data expanded by the print server computer and said at least one client computer to produce the bit-map data corresponding to the print data.

14.   The print data control method according to claim 13, wherein the step b) comprises the steps of:

at [a] the client computer,

selecting one from the sequential bands in sequence;

selecting an available one of the print server computer and the client computer by checking print data expanding process statuses thereof;

transferring a selected band to a selected computer;

expanding a client-received band to bit-map band data; and

setting a <u>print data expanding</u> client process status [of its own] to unavailable while expanding the <u>client-</u>received band and resetting the <u>print data expanding</u> client process status to available when <u>a print data expanding process of</u> the <u>client-</u>received band has been [expanded] <u>completed,</u> and

at the print server computer,

expanding a <u>server-</u>received band to bit-map band data; and

setting a <u>print data expanding</u> server process status [of its own] to unavailable while expanding the <u>client-</u>received band and resetting the <u>print data expanding</u> server process status to available when <u>a print data expanding process of</u> the <u>client-</u>received band has been [expanded] <u>completed</u>.

15.   (Amended)   The print data control method according to claim 13, wherein the step c) comprises the steps of:

determining whether the bit-map band data are received in original sequence of the bands;

rearranging the bit-map band data in the original sequence when a sequence of the bit-map band data is not identical to the original sequence; and

reproducing the bit-map data corresponding to the print data.